



CERTIFICATE

This is to certify that the Dissertation final report entitled
**“EXPERIMENTAL INVESTIGATION OF CLOSED LOOP PULSATING HEAT
PIPE THERMAL PERFORMANCE AND VALIDATION USING CFD ANALYSIS”**

Submitted by

Mr. SHAILESH DILIPRAO RAJENDRA

is the bonafied work completed under my supervision and guidance, in partial fulfillment for the requirement of degree of Master of Engineering (**Mechanical Engineering**) of the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.) in the academic year 2018-19.

Place: Aurangabad

Date: 14.07.2019

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[2018-19]

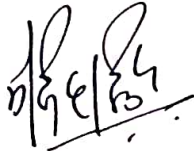
CERTIFICATE

This is to certify that, the Dissertation report entitled “**Experimental Investigation on Performance of Diesel Engine using Mixture of Diesel and Bio-Diesel as a Working Fuel with Copper Oxide & Zinc oxide Nano Particle Additive**”, which has been submitted herewith for the award of the ‘**Master of Engineering**’ in ‘**Mechanical Engineering (Heat Power)**’ of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.).

This is the result of the original work and contribution by ‘**Miss. M. B. Randive**’ under my supervision and guidance. The work embodied in this dissertation report has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma/examination body or university to the best of my knowledge and belief

Place: Aurangabad

Date: 18/12/2018



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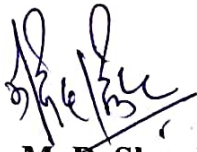
Aurangabad

CERTIFICATE

This is to certify that, the dissertation entitled “**Design and Analysis of Composite Drive Shaft for Light Motor Vehicle**”, which is being submitted herewith for the award of the ‘**Master of Engineering**’ in ‘**Mechanical Engineering**’ of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra State. This is the result of the original research work and contribution by ‘**Mr. Ravikumar Vishwambarji Taksande**’ under my supervision and guidance. The work embodied in this dissertation has not form earlier for basis of the award of any degree or compatible certificate or similar title of this any other diploma/examination body or university to the best of knowledge and belief.

Place: Aurangabad

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